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AUTHOR Friedman, Isaac A.
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ABSTRACT

The deliberation-resolution approach was used to study how adolescents cope with decision making. Deliberation involves identifying the problem, then exploring it, and developing a range of alternative solutions. Resolution means a clear, stable choice of one of the options with contingency plans should these be needed. Decision-making workshops and two empirical studies identified four principal decision-making patterns used by adolescents: (1) thoughtful determination; (2) vacillation; (3) shallowness; and (4) avoidance. It was found that thoughtful determination was reported as the most common coping pattern. It was also found that only 44 percent of the high school students reported that they felt experienced enough in making decisions, although some 60 percent of them reported that they felt confident enough to do so. Statistically significant and meaningful correlations were found between the adolescents' sense of confidence and thoughtful determination. Negative correlations were found between sense of confidence, experience in making decisions, vacillation, and shallowness. Suggestions for improving adolescent decision making were developed. (Contains 18 references.) (Author/KB)

Coping Patterns in Adolescent Decision-Making: The Deliberation-Resolution Approach

Isaac A. Friedman

The Henrietta Szold Institute

The National Institute for Research in the Behavioral Sciences

Correspondence: Professor Isaac A Friedman

**The Henrietta Szold Institute, 9, Columbia St. Kiryat Menachem,
Jerusalem 96583 Israel**

Tel: + 972-2-6494444, Email: Szold@Szold.org.il

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Coping Patterns in Adolescent Decision-Making: The Deliberation-Resolution Approach

ABSTRACT

This presentation introduces the Deliberation-Resolution approach to the study of how adolescents cope with decision-making. Deliberation involves identifying the problem then exploring it and developing a range of alternative solutions. Resolution means a clear, stable choice of one of the options with contingency plans should these be needed. Details about decision-making workshops and two consecutive studies conducted by the author are given. The workshops and studies identified four principal decision making patterns used by adolescents: Thoughtful Determination, Vacillation, Shallowness and Avoidance. It was found that Thoughtful Determination was reportedly the most common coping pattern. It was also found that only 44% of the students reported that they felt experienced enough in making decisions, although some 60% of them reported that they felt confident enough to do so. Statistically significant and meaningful correlations were found between sense of confidence and Thoughtful Determination. Negative correlations were found between sense of confidence, experience in making decisions, Vacillation and Shallowness. Suggestions as to improving adolescent decision making are discussed.

Coping Patterns in Adolescent Decision-Making: The Deliberation-Resolution Approach

The literature offers theoretical references to the development of adolescent decision making capabilities. For example, a number of psychosocial theories of adolescence (Erikson, 19509; Havighurst, 1972) emphasize the notion of developmental tasks mainly in the transition from childhood to adolescence and stress the critical need for effective decision making. According to these theories, one of the most important tools needed for resolving crises during each of the developmental phases is functional decision making skills which assist in solving conflicts or developmental tasks.

In terms of exploring ideas, ideals, beliefs, theories, commitments and roles, the adolescent's thinking already resembles that of the adult, although it is still free of the biases resulting from personal experiences. On the cognitive level, the awareness of the arbitrary nature of patterns and institutions allows adolescents to imagine desired alternatives for themselves and for society. Adolescence is a time of great risk, but also of great opportunity since decisions made now can significantly increase or limit life options.

According to McCandless and Coop (1979), decision-making ability is the most difficult skill to acquire. It is a skill of primary importance since it involves changes within the personality rather than changes forced on the individual by the passage of time. Tiedman (1961) has suggested a model for understanding the general process of adolescent decision making, with particular reference to the choice of a career. He defines what he terms 'stations' as activities that the adolescent has to experience in the process of making a decision. These stations are:

1. **Research** – a vague search accompanied by data gathering and classification that

will be used to build up the needed background information.

2. **Consolidation** - progress toward decision, assessment of attractive and unattractive alternatives, polishing ideas.
3. **Choice** - the individual makes a unique commitment to the choice and is rewarded with relief, hope and security.
4. **Clarification** - the adolescent seeks to clarify and understand the different outcomes resulting from the commitment and prepares to implement the decision.
5. **Indication** - the adolescent implements the decision and experiences the new environment it has created.
6. **Reformation** - the adolescent is now 'a confirmed believer' and becomes occupied with talking about and believing in the accomplished decision. There is a sense of self-empowerment and the need to justify the decision may even detract from the ability and willingness to be objective.
7. **Integration** - at the last station, the more mature members of society respond to the adolescent's choice. This may cause the adolescent to consider, rethink and perhaps change certain intentions arising from the decision. During this part of the process there is a chance of greater objectivity.

There is often a gap in the adolescents' decision-making competence and the level of their involvement in the issue in question. Some adolescents develop a negative or cynical attitude regarding their ability to influence important events through their making decisions and become alienated and apathetic. Other adolescents lack the confidence to make important decisions. Research shows (Mann et al, 1986) that self-image as a decision-maker increases with age. Low levels of decision-making confidence may be the result of too few opportunities to make decisions of any real significance. For example, many adolescents believe that school does not allow them to make decisions and that in fact they have no power to influence decisions (Collins & Hughes, 1982).

It is important to realize that many adolescents are cautious about getting involved in decision making. Part of the complacency typical of adolescents in decision-making situations should be seen as a defense mechanism provoked by fear. We might say that this 'I couldn't care less' stance conceals hidden conflicts regarding decisions and reflects a need to avoid painful choices. Perhaps complacency also reflects an ideological norm for the age group where to be 'cool' equals not to care. Some youth cultures place a high value on complacency or apathy.

In conclusion, we have seen that studies suggest that adolescents, particularly during the middle phase of adolescence, often acquire knowledge about the necessary steps required for systematic decision making (e.g., Ormond, Mann & Luszcz, 1987) and that they possess creative problem solving ability (e.g., Mann et al, 1986). Adolescents also show increased ability to making good choices (Weithorn & Campbell, 1982; Greenberg, 1983) and a strong commitment to action (e.g., Taylor, Adelman & Kaser-Boyd, 1983, 1985). Later adolescence is characterized by greater competence in areas in which adolescents have more experience. There is also evidence that younger people are weaker in certain aspects of decision making, e.g. (a) identifying the range of risks and gains (Kaser-Boyd, Adelman, & Taylor 1985); (b) predicting new alternative outcomes (Lewis, 1981); and (c) testing the reliability of information given by so called 'experts' (Lewis; 1981). The younger adolescents' weaknesses in these areas may be due to lack of experience. Indeed there is a broad range of age-related changes in ability during adolescence, which are measured against the standard of adult competence.

A. Decision Making Patterns

1. The Deliberation-Resolution model of decision making

Many decision-making models identify different stages and distinguish in particular between the pre-commitment and post-commitment phases (e.g. Huber 1980). While problem-solving activity is involved in each of these phases, the essential pre-decision task, i.e., choosing an option or policy, differs from the essential post-decision task (commitment), i.e., implementation and support for the chosen alternative. Even though it would be reasonable to assume that a conscientious decision-maker will pay close attention to the tasks of both phases, this is not necessarily so. Friedman (1989, 1996) developed a two-phase model which describes and analyses adolescent decision-making across different stages of the decision making process. He identifies two phases: *Deliberation* (pre-decisional) and *Resolution* (commitment and post-decision). Deliberation involves identifying and investigating the problem and developing alternative solutions. Resolution involves a clear, stable choice of one alternative with contingency plans if necessary. The two phases are conceptually separate and distinct. Some adolescents invest considerable time and effort deliberating about problem but fail to solve the problem. Other adolescents deliberate very little and choose an alternative which they implement with a great focus and commitment. Within each deliberation and resolution phase, Friedman defines the three levels of activity (low, medium, high) as follows:

Levels of Deliberation

Low: No thought or attention to the problem;

Medium: Superficial thought devoted to the problem and alternative solutions. Passive dependence on the others' opinions.

High: Serious thought to understanding the problem, formulating relevant options for solution, thorough evaluation of alternatives.

Levels of Resolution

Low: No choice made between alternatives; lack of conclusion.

Medium: Alternative chosen but low degree of commitment; unstable determination.

High: Alternative chosen, high level of commitment to thorough implementation

When combined, these three levels produce a nine-category taxonomy of decision-making processes as shown in Figure 1.

Figure 1 Here

2. Cognitive styles in adolescent decision making

To explore cognitive patterns in adolescent decision-making based on the Deliberation-Resolution taxonomy, I conducted decision-making workshops for high school students. 7-9 eleventh grade high school boys and girls (age 17) attended each workshop (Friedman, 1991). The purposes of the workshops were to formulate 'real life' problems and to devise some applicable decision making processes suitable for those problems. In each workshop, the first stage was devoted to formulating a set of 'normal' and 'serious' situations requiring decisions. The second phase involved describing in detail the behavior patterns employed to solve the already defined problems. At the start of the second phase, participants were asked the following question: "If you were faced with a real, serious, and urgent problem, such as the problem we have just been discussing, what would you do to resolve it?" The participants were told that the solution itself was irrelevant, since the main purpose of the workshop was to study the paths and

options involved in problem solving.

The situations presented were 'hot' adolescent decision issues all related to interpersonal relations. Examples of two problems are:

1. You were told today that a close friend of yours is spreading vicious rumors about you, behind your back.
2. You have sufficient ground to believe that your classmates take you too lightly, and too often take you for granted. You feel awful about it, and would very much like all this to change as soon as possible.

Workshop participants provided detailed descriptions of how they would gather and process information, and then distinguish between alternative courses of action. About 130 decision-making strategies were formulated in these workshops. These strategies can be viewed as cognitive decision-making styles since there was no evidence to show that what students said they would do is what they do in real decision making situations. Content analysis indicated that these patterns corresponded to the following decision-making strategies (introduced here in a descending order of use). The numbers in parentheses are those appearing in Figure 1: Thoughtful Determination (9), Shallowness (5), Vacillation (7), Avoidance (1), and Undeliberated Conclusion (3). Very few statements corresponded to other decision-making strategies (Numbers 8, 4, 6 and 2 shown in Figure 1).

Workshop participants were then asked to classify young decision-makers on the basis of the Deliberation-Resolution taxonomy. The classification below emerged. the numbers in parenthesis are those appearing in Figure 1:

1. **Earnest (Adaptive) Decision-Maker (9).** Weighs problem carefully, makes

clear choice, implements it thoroughly (high Deliberation, high Resolution).

2. **The Drawer (or 'Fast Shooter')** (3 or 6). Weighs problem very superficially, perhaps does not weigh it at all; somehow finds a (more or less suitable) solution; implements it firmly (medium or low Deliberation, high Resolution).
3. **The Vacillator** (7,8, or 4). Weighs problem, gathers information by asking questions; does not make a choice, or makes a choice which is "not final", or "leaves it open" (this is not a decision not to decide, it is a matter of leaving matters unsettled). (high Deliberation, low or medium Resolution).
4. **The Insouciant** (5,2). Weighs problem very superficially, or perhaps not at all; finds some solution, maybe by relying on others' help, implements it very hesitantly (tends to change course of action very easily), without caring much about the consequences. (low or medium Deliberation, medium Resolution).
5. **The Evader** (1,4). Weighs problem very lightly, perhaps does not even think about it; does not decide (low or medium Deliberation, low Resolution).

In order to gather further empirical evidence in support of the proposed typology of adolescent cognitive styles in decision making, a national random sample of 480 eleventh grade students (age 17) were asked to complete a questionnaire where they reported the frequency with which they applied each of the decision making strategies identified in the workshops. For this study I developed and validated a scale for measuring adolescent decision making strategies (Adolescent Decision Processes – ADP) based on the Deliberation-Resolution model (Friedman, 1996).

The choice of methodological approach to this study was Guttman's Facet Theory (1968), due to its advantages in conceptualizing complex constructs. Facet theory

employs smallest space analysis (SSA), a statistical model in which similarity coefficients among sets of objects are represented by distances in a multidimensional space. Given a correlation matrix of item scores, SSA represents these items as points on a Euclidean plane so that the higher the correlation between item scores, the closer the points are together. The item deployment picture (map) derived from a SSA often reveals patterns in the data that would otherwise remain obscure and is far easier to interpret than a table of coefficients.

FIGURE 2 HERE

Figure 2 shows a schematic deployment of variables in a two dimensional space. The top left-hand side of the map marks the 'High Deliberation' area and the lower right hand side is the 'No Deliberation' or 'Medium Deliberation' area. The top right-hand side of the map contains the 'No Resolution' or 'Medium Resolution' area. The lower left-hand side marks the 'High Resolution' area, and the upper right side the 'No Resolution' area. **Thoughtful Determination** items lie opposite the **Avoidance** and the **Shallowness** items. **Vacillation** items are located opposite the **Undeliberated Conclusion** items. It is interesting to note that **Shallowness** items are located in great proximity to the **Avoidance** items (which indicates that those two groups of items are conceptually close to one another). These findings support the structure and content of the decision-making coping patterns, and indicate that adolescents can distinguish well enough between major patterns, high and low levels of deliberation or resolution.

B. Associations Among Decision-Making Coping patterns, Confidence, Experience and Involvement in Decision Making

Several years later, I conducted another study of decision-making coping patterns for Israeli high school students. The purpose of this study was to investigate the association among decision-making coping patterns, sense of confidence, involvement, and experience in decision-making. More specifically, the study aimed to address the following questions: (a) What are the most common coping patterns in decision-making, (b) What are the consultation patterns (receiving and giving advice to significant others) in the decision making process, (c) How confident and experienced adolescents feel when making decisions, and (d) How do adolescents define adaptive and maladaptive decision makers, and what can be done to improve decision making capabilities.

The sample consisted of 166 randomly selected 11th and 12th grade students (ages 17-18) in academic, vocational and comprehensive high schools (religious and secular) throughout the country. The sample contained 111 boys and 47 girls (8 failed to disclose their gender); 109 were studying at academic schools, 46 in vocational (technological) schools and 5 in comprehensive schools (6 did not specify their school category). 74 were in 11th grade (aged 16) and 83 in 12th grade (aged 17) (8 did not specify their grade). 106 students were from secular schools and 46 from religious schools (14 did not specify).

The students were given a questionnaire named *Decision Making by Young People*. They were told that the researchers wished to know what students do when faced with a serious, urgent problem, the steps they take (who consults them on serious issues), who they consult (who asks them for advice), their confidence and experience in making decisions, and how they viewed their peers as good or bad at making decisions. A short version of the Adolescent Decision Processes-ADP scale was used in this study, shown in Table 1.

 Table 1 here

The questionnaire presented two 'social' and 'personal' problems and students were asked to indicate their rate of exposure to these types of problems. The remaining questionnaire sections posed the following questions: "Who do you consult when making a decision?" "Who consults you and on what issues?" "How do you feel as a decision maker?" "How experienced are you in making decisions?" These questions were all closed, and a predetermined list of optional answers was provided. The questionnaire ended with three open questions: "What in your opinion are the characteristics or qualifications of a good decision maker?" "What kind of training or additional knowledge do you think you might need to become a good decision maker?" and "What in your opinion are the qualifications of a bad decision maker?" The main results are shown below.

1. Correlations among coping patterns sense of confidence and expertise in decision-making

 TABLE 2 HERE

Several points are worth mentioning with regard to Table 2. Thoughtful Determination was found to be the most frequently used coping pattern reported by the students ($M=3.77$). Levels of confidence and experience were not very high ($M=2.75$ and $M=2.74$ respectively, ranged from 1 through 5).

Confidence and experience correlated negatively with Vacillation and Shallowness, and

positively with Thoughtful Determination. In general, the negative correlations accounted for more of the variance than the positive ones. For example, sense of confidence accounted for 22% of the variance in Vacillation and 16% of the variance in Shallowness, whereas Sense of Confidence accounted only for 6% of the variance in Thoughtful Determination. It should also be noted that Confidence and Experience shared 44% of common variance.

TABLE 3 HERE

Table 3 shows the frequency distributions for responses to the items appearing under the heading *Confidence* and *Experience* in decisions making, which included two 'straight-forward', direct statements (Item 51 - Confidence, and Item 56 - Experience see Table 3). Table 3 indicates that 57% of the students expressed confidence in their ability to make decisions (Item 51), but only 44% reported that they felt experienced and knowledgeable enough to deal with problems and be able to make good decisions (Item 56).

2. Sharing problems and consulting others

TABLES 4 AND 5

Table 4 shows the frequency with which students consult significant others. Table 5 shows the frequency with which students are consulted by significant others. Several important findings emerge from these tables. It seems that students mostly consult their friends ($M=4.24$) and consult their teachers, siblings and most importantly school

counselors the least (Table 4). Students also reported that their parents consult them most often in matters relating to themselves, but not in matters exclusively concerning their parents (Table 5).

3. Correlations between confidence when making decisions and consultation with significant others

TABLE 6 HERE

Correlations were calculated for frequency scores of consultations with significant others and decision-making confidence scores. Table 6 shows only the statistically significant correlations. Two correlation coefficients are of special interest. First the negative correlation between consultation with the school counselor and self-confidence when making decisions ($r = -.23$). This is not a 'meaningful' correlation ($r^2 = .053$, which means that both variables share 5.3% of their common variance). However, this indicates that the less confident students tend to turn to their school counselor for advice more than the students who are more confident about making decisions. Second, positive, albeit relatively low, correlations among scores of confidence in making decisions and items 46, 48, and 50. This indicates that being consulted by significant others is associated to a certain extent with Self confidence in making decisions.

4. Correlation between coping patterns and student's evaluation of their own ability to make decisions

TABLE 7 HERE

The correlations between decision-making coping pattern scores and scores for students' decision-making perceived ability were also calculated. There are two points of interest in the data presented in Table 7. First, the correlation between Thoughtful Determination and students' perception of their decisions as 'good' decisions is low and statistically not significant, which means that there is no association between a good process of decision making and good perceived results. Second, statistically significant and meaningful correlations were found between Shallowness and scores of the sense of being less able than others to make decisions.

5. What constitutes a 'good' decision maker and what can be done to become one

TABLES 8,9,10 Here

The data in Table 9 indicate that there are two key ways to become a good decision-maker. The first is proactive: acquiring knowledge, raising self-confidence and seeking direction and guidance (57.7%); the second is fatalistic: do nothing, you just need 'natural' knowledge and experience (42.2%).

The most important point in Table 10 is the relatively low number of entries (n=58). Students failed to come up with many good suggestions for a course of action which

could help them become better decision-makers. The suggestion made most frequently was to “seek help or advice” (43.1%), which was followed by “use more discretion in making decisions, take more time in making decisions” (27.6%).

C. In Conclusion: Three Lessons Learned From Decision-Making Workshops

Three major lessons were learned from the workshops that I have been conducting. They are mentioned here briefly, and will be elaborated on in the presentation (if time allows).

1. The need for a predecisional stage in the normative decision making process

Here Figure 3

The “normative” (adaptive) decision-making model includes the following steps (see Figure 3):

1. A clearly formulated problem (as a starting point);
2. Gathering information, clarifying values and goals pertaining to the problem;
3. Developing alternatives (optional solutions);
4. Evaluating alternatives;
5. Choice;
6. Execution.

It was found very helpful, even crucial sometimes, to start the decision-making process

with a pre-decisional stage, which begins with an “event”, or a “problematic situation”, out of which a well defined “problem” should be extracted (see Figure 4).

Here Figure 4

2. The pivotal role of values and value clarification in making a choice

In many cases it was evident that adolescents just could not make a choice (even after long and detailed deliberation), without first considering their goals, and in particular their values. Therefor, one or two sessions should have been devoted to this issue. The use of a “Value Model”, such as the one presented in Figure 4, Was found very helpful.

3. The path from Avoidance or Shallowness to Thoughtful Determination goes through Vacillation. Very few adolescents were able to move directly from Avoidance or Shallowness, or from Undeliberated Resolution to Thoughtful Determination. Many “got stuck” in Vacillation. Clarifying values and using techniques to apply values in the choice process helped dramatically (see Figure 5).

Here Figure 5

SOME POINTS FOR DISCUSSION

1. Confidence and experience in making decisions are linked with adaptive decision making but evidently do not 'tell the whole story'. There are most likely other factors playing an important role in explaining why adolescents resort to or refrain from adaptive decision making strategies.
2. Students whose significant others, particularly parents and brothers, share problems with them reported being confident when making decisions. Does this mean that involvement with others increasing sense of confidence? The answer is probably yes and this should serve as a guideline for parents.
3. Thoughtful Determination was not found to be statistically linked with students' sense of 'good' decisions. This finding contradicts the common belief that 'adaptive' decision processes produce 'good outcomes'.
4. Vacillation (thinking systematically and deeply about the problem, but not being able to make a choice) correlated meaningfully and negatively with sense of confidence in decision making. It may of course be that vacillation is affected by diffidence and that being unable to be resolute affects one's sense of confidence in making decisions. Both explanations may be plausible and in need of further research.
5. Shallowness is strongly linked with self degrading or sense of inferiority in comparison with others.

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Figure 1
Deliberation-Resolution Based
Decision-Making Coping Patterns

D E L I B E R A T I O N	High	Vacillation (7)	Thoughtful Unsteady Conclusion (8)	Thoughtful Determination (9)
	Medium	Incomplete Consideration No Conclusion (4)	Shallowness (5)	Incompletely Considered Conclusion (6)
	low	Avoidance (1)	Undeliberated Unsteady Conclusion (2)	Undeliberated Conclusion (3)
		Low	Medium	High
		RESOLUTION		

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Figure 2
Adolescents Cognitive Styles in Decision Making
A Schematic Presentation of an SSA Map

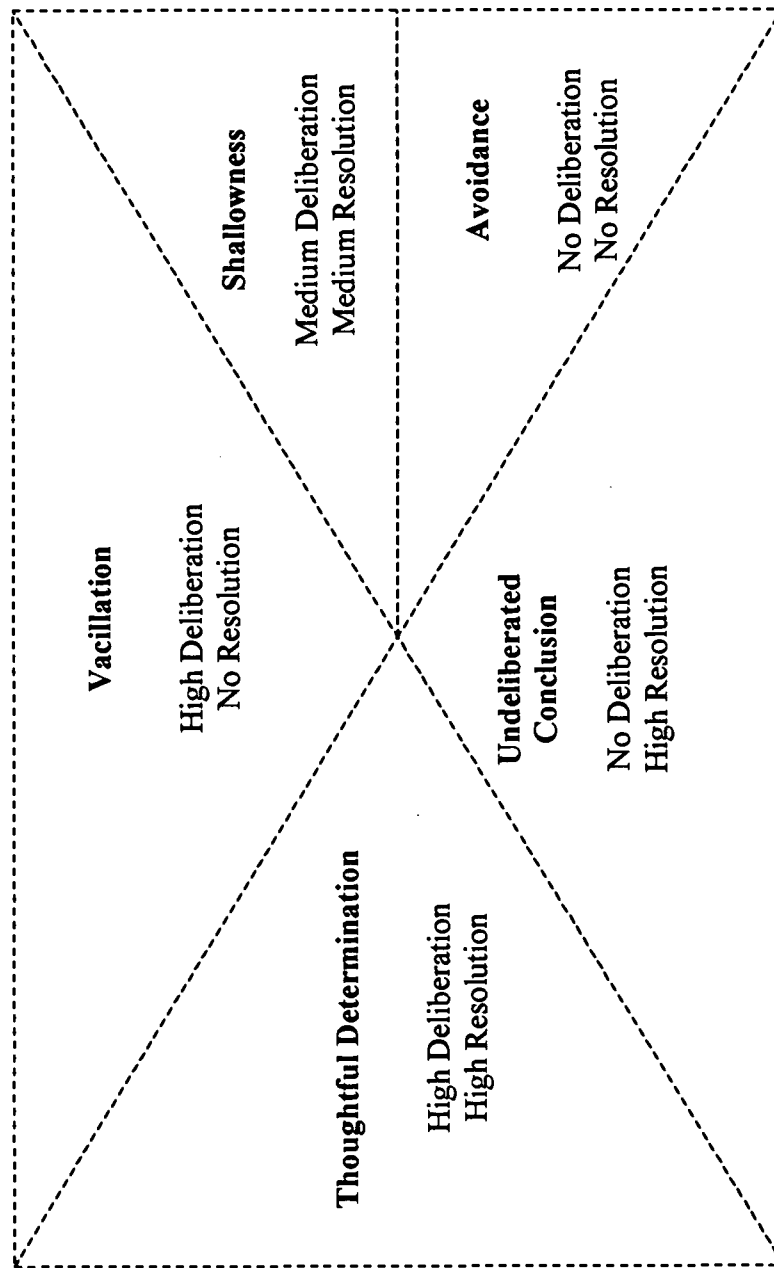


Figure 3
The Adaptive Decision Making Model

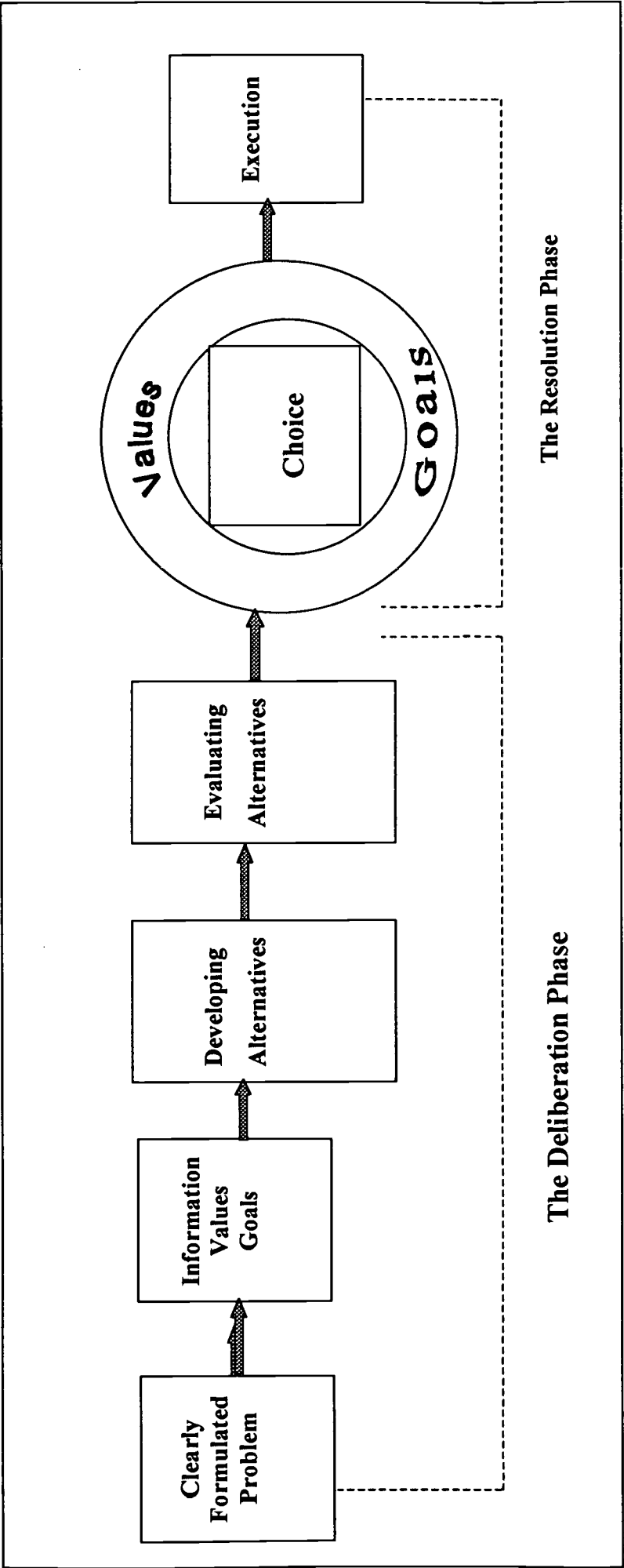
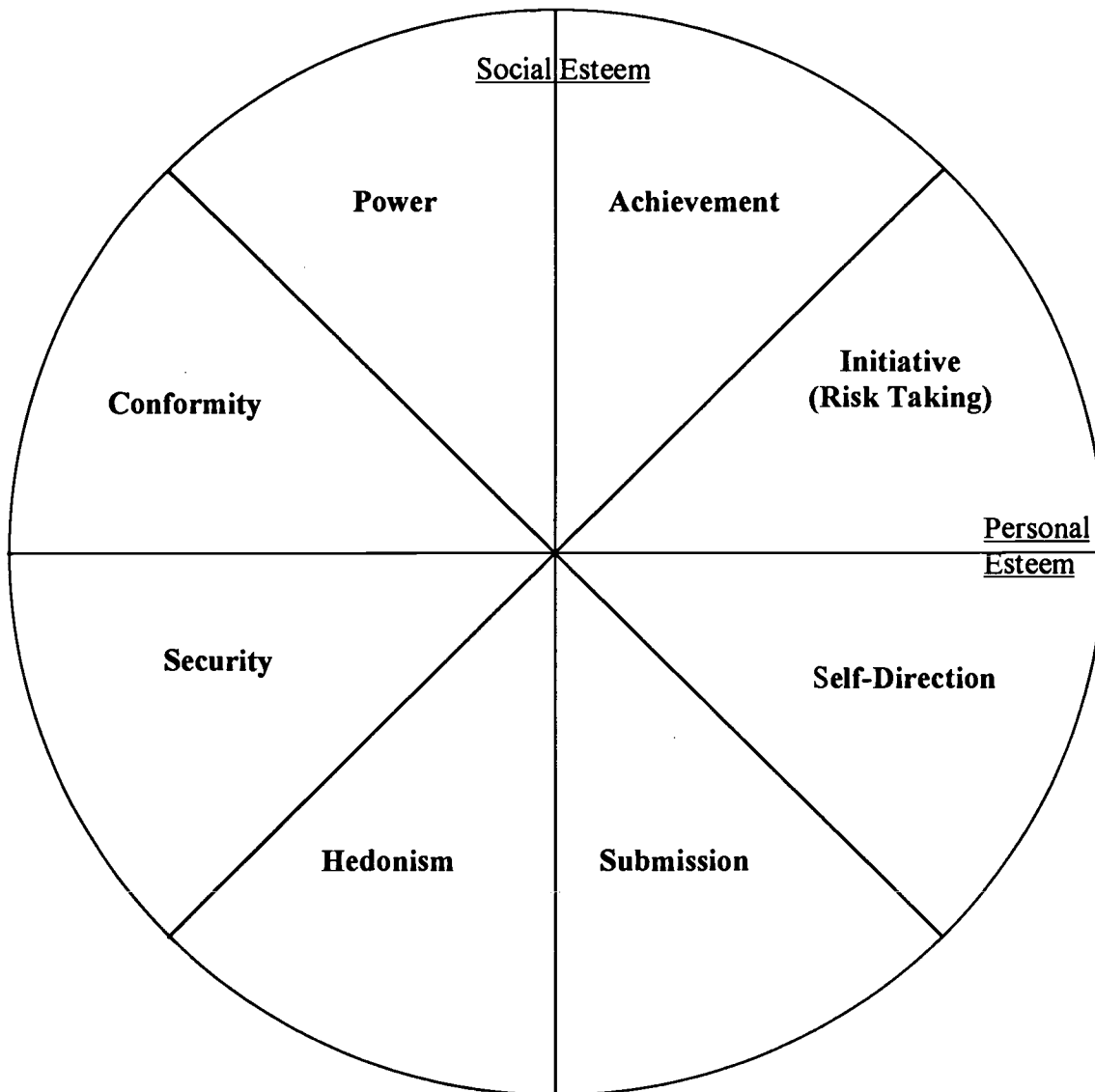


Figure 4
A Dynamic Model of Personal Values



Self-Direction: Independent thought and action choosing, creating, and exploring.

Conformity: Restraint of actions, inclinations. And impulses likely to upset or harm others and violate social expectations or norms.

Initiative: Enhancement of new ideas, actions and relationships and of self.

Hedonism: Pleasure or sensuous gratification for oneself.

Power/Hierarchy: Attainment of social status and control or dominance over people and resources.

Submission/Equality: Acceptance of social norms, protection of the welfare of all people.

Figure 5
The Pre-decisional Stage Model

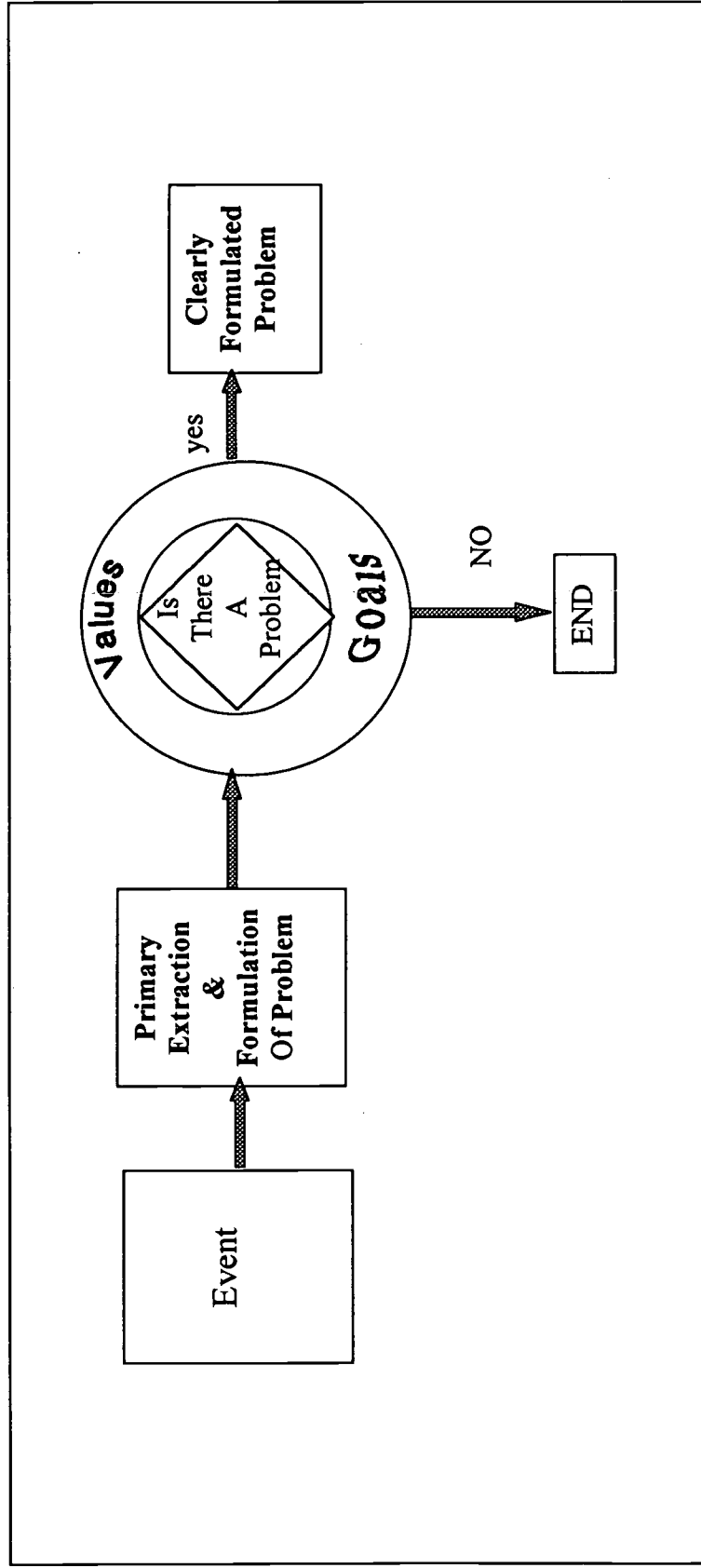


Figure 6

**Transition tracks of Decision making coping patterns following
Participation in Decision making workshops**

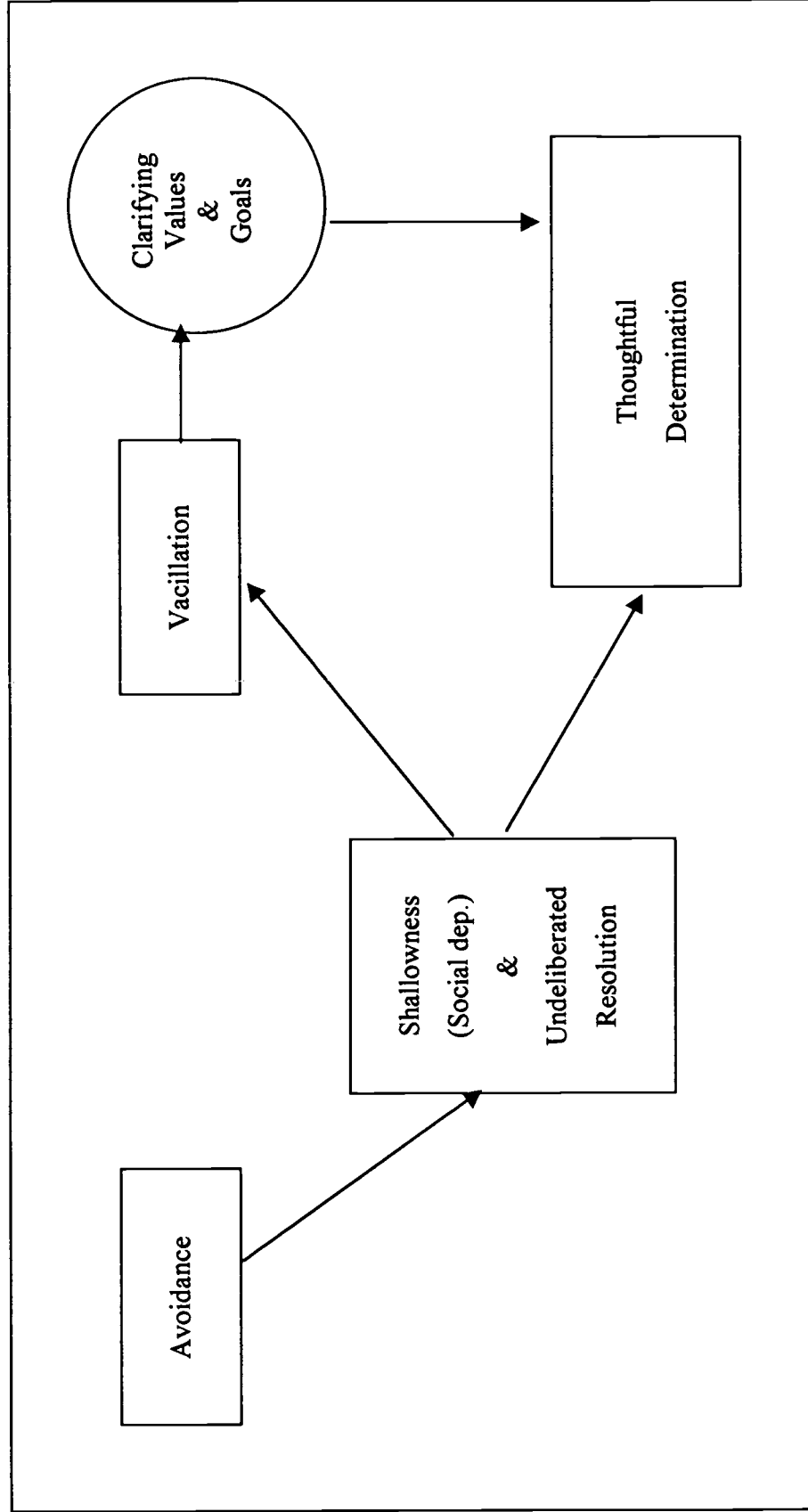


Table 1
Factor coefficients for items in the Adolescent
Decision Processes (ADP-short version)

Item	Factor I	Factor II	Factor III
Vacillation ($\alpha=.73$)			
22. I find different solutions to the problem, then think that even better solutions can be found, and do not make up my mind	.64	.14	-.06
25. I weigh several solutions to the problem, make a decision, and then quickly change my mind	.63	.16	-.19
29. I put in a lots of thinking about the problem and its possible solutions, and cannot decide what to do	.60	.13	-.07
19. I spot the problem, formulate several possible solutions, evaluate the pros and cons for each solution, and then don't decide at all	.60	.03	.03
Shallowness ($\alpha=.72$)			
20. I make a final judgement without prior extensive investigation or consideration	.15	.66	-.07
17. I make a decision without prior checking or thinking	-.04	.63	.10
33. I make a decision and am ready to change it without seriously checking in depth other solutions	.31	.58	-.14
36. I decide "somehow" based on what I see or hear what others are doing in similar cases	.18	.58	-.06
Thoughtful Determination ($\alpha=.65$)			
26. I weigh several solutions to the problem and then make a final decision	-.02	-.08	.66
31. I make a decision following profound thinking	-.03	-.03	.60
28. I decide after a lot of thinking and carry out the decision as is	-.08	.20	.54
35. I check and weigh the problem and its alternative solutions, make a decision and act accordingly until the problem is completely solved	-.13	-.23	.47

Table 2
Means, Standard Deviations, and Pearson
Correlations Among Decision-Making
Coping Patterns, Sense of Confidence and
Experience in making Decisions

	M*	SD	1 Vac.	2 Shall.	3 Tho. Det.	4 Conf.
1. Vacillation	2.43	.08	-			
2. Shallowness	2.23	.08	.29	-		
3. Thoughtful Determination	3.77	.09	-.17	-.10	-	
4. Confidence	2.75	.09	-.47	-.40	.25	-
5. Experience	2.74	.07	-.41	-.34	.27	.66

* M = mean score on a 1 through 5 range

Table 3
Frequency distribution (percent), means and SD of
Confidence and Experience in making decisions

No. Item	Item	1	2	3	4	5	4+5	N	M	SD
Confidence										
51.	I feel pretty confident with my ability to make decisions	3.8	9.4	29.4	43.1	14.4	57.5	160	3.55	.077
52.	I am not as good as others in making decisions ®	31.6	38.6	19.0	8.2	2.5	10.7	158	2.11	.082
54.	When faced with a serious problem, it is hard for me to tell what to do ®	13.8	40.6	25.6	13.8	6.3	20.1	160	2.58	.086
Experience										
56.	Faced with a serious problem, I feel a have sufficient experience and knowledge how to deal with it and how to make good decisions	3.1	13.1	39.4	35.6	8.8	44.4	160	3.34	.073.
57.	I do not feel experienced enough in executing my decisions ®	16.4	49.7	25.2	6.3	2.5	8.8	159	2.29	.072.
58.	I feel I have enough know-how to get information and alternatives for solving my problems	3.8	12.7	38.0	36.7	8.9	45.6	158	3.34	.075.
59.	I feel that I am not experienced enough in making decisions by myself ®	29.7	48.7	15.8	4.4	1.3	5.7	158	1.99	0.69

The response range:

1. Does not characterize me at all
2. Characterizes me a little
3. More or less characterizes me
4. Characterizes me to a large extent
5. Really characterizes me a lot

® = item scoring should be reversed in certain data processing procedures (not in this table)

Table 4

With whom do you consult when facing a serious problem and how often
Frequency distribution (percent), means and SD

	Never 1	rarely 2	Occasionally 3	Often 4	Very Often 5	Always 6	4+5+6	N	M	SD
1. Friends	2.4	7.9	15.9	29.9	25.0	18.9	73.8	164	4.24	.10
2. Parents	7.9	18.9	22.0	25.0	14.6	11.6	51.2	164	3.54	.11
3. No one	31.7	21.3	12.8	18.3	12.8	3.0	34.1	164	2.68	.12
4. Adult (non-parent)	33.5	28.7	21.3	9.8	4.3	2.4	16.5	164	2.30	.10
5. Teachers	42.4	30.9	13.9	9.1	2.4	1.2	12.7	165	2.12	.09
6. Brother or sister	23.3	15.3	17.2	26.4	12.9	4.9	88.4	163	2.05	.20
7. School Counselor	83.6	7.9	4.8	2.4	0.6	0.6	3.6	165	1.30	.06

Table 5

Who Consults with you in solving problems, and how often
Frequency distribution (percent), means and SD

	Never 1	rarely 2	Occasionally 3	Often 4	Very Often 5	Always 6	4+5+6	N	M	SD
46. My parents - with issues pertaining to me	0.0	3.7	6.1	26.8	26.2	37.2	90.2	164	4.87	.09
47. My parents - with general family and "domestic" problem	1.2	4.3	11.6	33.5	34.1	15.2	82.8	164	4.41	.09
45. My friends - with their personal problems	2.4	11.0	12.8	32.3	29.9	11.6	73.8	164	4.11	.10
44. My friends - with their "social" problems	1.8	9.1	16.5	29.3	28.7	14.6	72.6	164	4.18	.10
48. My parents - with general issues (public matters: social, economic and political)	1.2	7.9	22.0	26.8	29.9	12.2	68.9	164	4.13	.09
50. My brother(s) or sister(s) - with their own problems	11.1	14.2	24.7	31.5	13.0	5.6	50.1	162	3.38	.11
49. My parents - with their personal problems	14.6	28.7	23.2	22.0	7.9	3.7	33.6	164	2.91	.10

Table 6

Statistically significant ($p < .05$) Correlations among consultations with others in dealing with problems and sense of confidence in making decision (n=160)

Item number	Item Content	Pearson's r
43	I Consult with my school counselor	-.23
46	My parents share with me their thoughts and ideas in decisions pertaining to me	.23
48	My parents share with me their "general" ideas (dealing, for instance, with public, political, social matters etc.)	.19
50	My brother(s) or sister(s) share with me their problems and decisions	.17

Table 7
Correlations among decision making coping patterns and students feelings
about their decisions and decision making capabilities (n=165)

	Vacillation	Shallowness	Thoughtful Determination
51. I feel pretty confident in my ability to make decisions	-.33*	-.14**	.29*
52. I am not as good as others in making decisions	.39*	.46*	-.17**
53. The decisions I make turn out to be good ones	-.31*	-.17**	.12 ^{NS}
54. When I face a serious problem I find it difficult to know what to do	.35*	.22*	-.10 ^{NS}
55. I am easily convinced that other people's decisions are better than mine	.33*	.44*	-.24*

* $p < .01$

** $p < .05$

NS = $p > .05$

Table 8
The Characteristics of a “Good” Decision Maker

	percent
1. Serious, reasonable, “intelligent”	23.2
2. Analytical and critical, flexible	20.5
3. Decisive, firm, “strong character”	13.5
4. Self confidence	13.0
5. Readiness and “wisdom” to consult with others	9.7
6. Experience, knowledge	8.6
7. Resilience	5.4
8. Self awareness	3.2
9. An adaptive decision maker is judged by results (“the proof of the pudding is in the eating”)	2.7
Total	100.0
Number of entries:	185

Table 9
What do you need to become a good decision maker

	percent
1. Acquire knowledge	31.1
2. Nothing	23.3
3. Strengthen self confidence, decisiveness	22.2
4. "Natural knowledge", Experience	18.9
5. Orientation, Consultation	4.4
Number of entries: 90	

Table 10
How can adolescents improve their problem solving abilities

	percents
1. Seek help, consultation	43.1
2. More discretion, more time	27.6
3. Experience and training	8.6
4. Strengthening self confidence	8.6
5. Standing against group pressures	6.9
Number of entries: 58	



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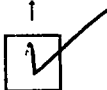
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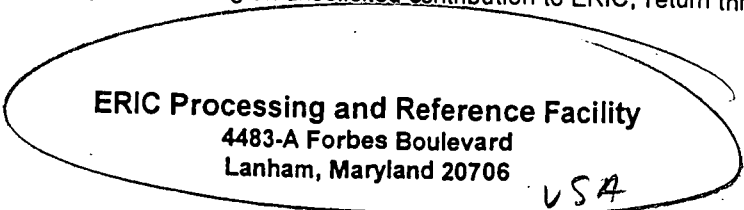
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